AUTHOR INDEX

Alekseevskii, N. E., L21
Aoki, K., 105

Beck, E., L17
Berger, R., 141
Bluhm, K., 133
de Boer, F. R., 113
Boguslavskii, Yu. Ya, 249
Bryant, F. J., 213
Buddhudu, S., 213
Buschow, K. H. J., 97

Cadogan, J. M., L7
Chang, Y. C., 113
Chattopadhyay, K., 105
Chen, N.-Y., 167
Chuang, Y. C., 113

Dantzer, P., 27
Dirken, M. W., 97

Ehmann, A., L17, L25
Elschner, B., L25

Ferro, D., 1
Folkerts, W., 181

Goncharova, V. A., 249
Gren, B., L21
Gribanov, A. V., 239
Grimvall, G., 195
Gross, R., L25
Guillermet, A. F., 195
Gusei, L. S., 239

Haas, C., 181
Hayashi, K., 19
Hipler, K., L25
Huebener, R. P., L25
Hyoma, M., 19

Il'ina, G. G., 249
Isobe, Y., 261

Jakes, D., 51
Jandova, J., 51
Ji, C.-L., 269
Josephy, Y., 227

Kamal, R., 79
Kan, L., L25
Kanematsu, K., 9
Kao, L., 113
Karczynski, F., 175
Kasprzyk, A., 121
Kemmler-Sack, S., L17, L25
Khan, H. R., L17, L25
Kiemel, R., L25
Kistaiah, P., L35
Kobayashi, K. I., 9
Kost, M. E., 185
Krutzsch, B., L35
Kumar, J., 59
Kuznetsov, N. T., 185

Launay, S., 161
Lee, D.-B., L1
Lösch, S., L25
Lovleen, xxx, 79
Lundgren, L., 41
Lundstrom, T., 41

Mahe, P., 161
Martinot, L., 73
Masumoto, T., 105
Mitin, A. V., L21
Miyake, M., 261
Muller-Buschbaum, Hk., 133

Ning, Y.-T., 167
Nishihara, H., 19
Nizhankovskii, V. I., L21
Northwood, D. O., 149

Okagaki, T., 9
Orgaz, E., 27
Ozawa, E., 89

Piacente, V., 1

Qian, S., 149
Quarton, M., 161

Raub, Ch. J., L17, L25
Ron, M., 227
Rudometkina, M. V., 239

Sakka, Y., 89
Sanders, J. H., 277
Satyanarayana Murthy, K., L35
Saxena, R., 59
Scardala, P., 1
Schäfer, W., L25
Schlichenmaier, M., L25
Sekine, M., 9
Seropegin, Yu. D., 239
Shilov, A. L., 185
Simkovich, G., L1
Slebarski, A., 121
Sljusarenko, E. M., L11
Soldatov, V. S., L11
Son, P., 261
Starosta, J., 175
Sugiyama, T., 9
Sun, J.-Z., 269

Tatarchuk, B. J., 277
Tavadze, F. N., 41
Thiel, R. C., 97
Tsagareishvili, G. V., 41
Tsikaridze, D. N., 41
Tsiskarishvili, G. P., 41

Uchikoshi, T., 89

Vishnuvardhan Reddy, C., L35

Warchulska, J., L21
Wojciechowski, W., 175
Wu, C. H., 113, L31

Xi, Z.-P., 269
Xu, H., 167

Yamanaka, H., 19
Yanagitani, A., 105

Zarek, W., 121
Zhen, Y., 167
Zhou, X.-M., 167
Zhu, J.-Z., 167

© Elsevier Sequoia/Printed in The Netherlands

SUBJECT INDEX

Alloy
  preparation of homogeneous alloy buttons in magneto-controlled arc furnace in single operation, L31
Amorphous
  formation and crystallization of H-induced amorphous $SmFe_2H_{3.6}$ alloy, 105
Arc furnace
  preparation of homogeneous alloy buttons in magneto-controlled arc furnace in single operation, L31
Arsenic
  anisotropic thermal expansivity of zircon-type rare earth arsenates, L35

Barium
  superconductivity in Tl–Ba–Cu–O system, L21
Boron
  electron paramagnetic resonance and static magnetic susceptibility investigations of solid solutions of Mn in β-rhombohedral B, 41
  Gibbs free energy of formation of NdB_4 and Nd_2FeB_3, 269
  metal oxides with B interlayers Ni_5-MB_2O_{10}, 133
  structure and magnetic properties of Nd–Fe–B alloys, 113

Carbide
  carbide layer growth behaviour in Mo coating on graphite at elevated temperatures, 261
Chromium
  oxidation behaviour of Mo and Cr alloys, L1
Coatings
  carbide layer growth behaviour in Mo coating on graphite at elevated temperatures, 261
Copper
  superconductivity in Tl–Ba–Cu–O system, L21
  synthesis and characterization of layered metal $TlCu_2S_2$, 141

Diffusion
  calculation of diffusion paths in Mo–Nb–V systems, L11

Elastic properties
  anomalies in elastic properties and features of electronic transitions in La and Pr at pressures up to 84 kbar, 249
Electron paramagnetic resonance
  electron paramagnetic resonance and static magnetic susceptibility investigations of solid solutions of Mn in β-rhombohedral B, 41
Electronic structure
  electronic structure of RhTi phases, 181
Electronic transitions
  anomalies in elastic properties and features of electronic transitions in La and Pr at pressures up to 84 kbar, 249
Erbium
  optical transitions of Er^{3+}:La_2O_2S and Er^{3+}:Y_2O_2S, 213

Films
  formation of NaCl- and Cu_2O-type oxides of Pt and Pd on C and alumina support films, 59

Germanium
  phase equilibria in Ti–Nb–Ge system at 1170 K, 239
Gold
  low-temperature sintering and gas desorption of Au ultra-fine powders, 89
Graphite
  carbide layer growth behaviour in Mo coating on graphite at elevated temperatures, 261

Hydrides
  formation and magnetic properties of crystalline and amorphous $SmCo_2$ hydrides, 9

© Elsevier Sequoia/Printed in The Netherlands

hydriding kinetics: role of thermal transfer, 27
Hydrogen
activation and deactivation mechanisms for thin-film Fe–Ti hydrides, 277
formation and crystallization of H-induced amorphous $SmFe_2H_{3.6}$ alloy, 105
kinetic measurements of $LaNi_5H_x$ and $MmNi_{4.15}Fe_{0.85}H_x$ with constant pressure differentials, 227
reversible and irreversible transformations in intermetallic compound–H systems, 185
thermodynamic characterization of $Zr(Fe_xCr_{1-x})_2$–H systems, 149

Indium
wetting of solid oxide electrolytes and In_2O_3 by liquid In, 51
Intermetallic compounds
prediction and synthesis of new intermetallic compounds between transition metals and rare earth metals, 167
reversible and irreversible transformations in intermetallic compound–H systems, 185
Iron
activation and deactivation mechanisms for thin-film Fe–Ti hydrides, 277
dynamics of magnetic iron clusters in $Y(Fe_xAl_{1-x})_2$ alloys, 121
Gibbs free energy of formation of NdB_4 and Nd_2FeB_3, 269
Mössbauer study of site occupation in $YFe_{10}V_2$, L7
structure and magnetic properties of Nd–Fe–B alloys, 113
thermodynamic characterization of $Zr(Fe_xCr_{1-x})_2$–H systems, 149

Kinetics
hydriding kinetics: role of thermal transfer, 27
kinetic measurements of $LaNi_5H_x$ and $MmNi_{4.15}Fe_{0.85}H_x$ with constant pressure differentials, 227

Lanthanum
anomalies in elastic properties and features of electronic transitions in La and Pr at pressures up to 84 kbar, 249
kinetic measurements of $LaNi_5H_x$ and $MmNi_{4.15}Fe_{0.85}H_x$ with constant pressure differentials, 227
optical transitions of Er^{3+}:La_2O_2S and Er^{3+}:Y_2O_2S, 213

Magnetic properties
dynamics of magnetic iron clusters in $Y(Fe_xAl_{1-x})_2$ alloys, 121
formation and magnetic properties of crystalline and amorphous $SmCo_2$ hydrides, 9
structure and magnetic properties of Nd–Fe–B alloys, 113
Magnetic susceptibility
electron paramagnetic resonance and static magnetic susceptibility investigations of solid solutions of Mn in β-rhombohedral B, 41
Mercury
vaporization enthalpies of black and red Hg sulphides and their heat of transition from vapour pressure measurements, 1
Misch metal
kinetic measurements of LaNi5H_x and $MmNi_{4.15}Fe_{0.85}H_x$ with constant pressure differentials, 227
Mixed valency
synthesis and characterization of new tellurates of mixed valency, 161
Molecular structure
molecular structure and properties of Ni(II) complexes with phenylalanine, 175
Molybdenum
calculation of diffusion paths in Mo–Nb–V systems, L11
carbide layer growth behaviour in Mo coating on graphite at elevated temperatures, 261
oxidation behaviour of Mo and Cr alloys, L1
Mössbauer spectroscopy
effect of substitution of V in $Nd_2Fe_{14}B$ studied by Mössbauer spectroscopy, 79
Mössbauer study of site occupation in $YFe_{10}V_2$, L7

Neodymium
effect of substitution of V in $Nd_2Fe_{14}B$ studied by Mössbauer spectroscopy, 79

Gibbs free energy of formation of NdB_4 and Nd_2FeB_3, 269
structure and magnetic properties of Nd–Fe–B alloys, 113
Nickel
kinetic measurements of $LaNi_5H_x$ and $MmNi_{4.15}Fe_{0.85}H_x$ with constant pressure differentials, 227
metal oxides with B interlayers $Ni_5MB_2O_{10}$, 133
molecular structure and properties of Ni(II) complexes with phenylalanine, 175
Niobium
calculation of diffusion paths in Mo–Nb–V systems, L11
phase equilibria in Ti–Nb–Ge system at 1170 K, 239

Optical transitions
optical transitions of Er^{3+}:La_2O_2S and Er^{3+}:Y_2O_2S, 213
Oxides
influence of preparation technique of T_c in high T_c superconductor $Bi_{3/2}Pb_{1/2}Sr_2CaCu_2O_y$, L25
investigation of superconductivity and physical properties of some spinel-, perovskite- and pyrochlore-type oxides, L17
superconductivity in Tl–Ba–Cu–O system, L21

Palladium
formation of NaCl- and Cu_2O-type oxides of Pt and Pd on C and alumina support films, 59
Phase equilibria
phase equilibria in Ti–Nb–Ge system at 1170 K, 239
Phenylalanine
molecular structure and properties of Ni(II) complexes with phenylalanine, 175
Platinum
formation of NaCl- and Cu_2O-type oxides of Pt and Pd on C and alumina support films, 59
Praseodymium
anomalies in elastic properties and features of electronic transitions in La and Pr at pressures up to 84 kbar, 249
Preparation technique
influence of preparation technique of T_c in high T_c superconductor $Bi_{3/2}Pb_{1/2}Sr_2CaCu_2O_y$, L25

Rare earths
anisotropic thermal expansivity of zircon-type rare earth arsenates, L35
crystal-field effects in rare earth compounds with $ThCr_2Si_2$ structure, 97
prediction and synthesis of new intermetallic compounds between transition metals and rare earth metals, 167
Rhodium
electronic structure of RhTi phases, 181

Samarium
formation and crystallization of H-induced amorphous $SmFe_2H_{3.6}$ alloy, 105
formation and magnetic properties of crystalline and amorphous $SmCo_2$ hydrides, 9
Selenides
new family of 2Hb-type layered diselenides preparation of 2Hb–$Re_{1/2}Ta_{1/2}Se_2$ and 2Hb–$Os_{1/3}Ta_{2/3}Se_2$, 19
Sulphides
vaporization enthalpies of black and red Hg sulphides and their heat of transition from vapour pressure measurements, 1
Sulphur
synthesis and characterization of layered metal $TlCu_2S_2$, 141
Superconductivity
influence of preparation technique of T_c in high T_c superconductor $Bi_{3/2}Pb_{1/2}Sr_2CaCu_2O_y$, L25
investigation of superconductivity and physical properties of some spinel-, perovskite- and pyrochlore-type oxides, L17
superconductivity in Tl–Ba–Cu–O system, L21

Technetium
thermodynamic properties of Tc, 195
Tellurium
synthesis and characterization of new tellurates of mixed valency, 161
Thallium
superconductivity in Tl–Ba–Cu–O system, L21

synthesis and characterization of layered metal $TlCu_2S_2$, 141
Thermal expansion
anisotropic thermal expansivity of zircon-type rare earth arsenates, L35
Thermodynamics
Gibbs free energy of formation of NdB_4 and Nd_2FeB_3, 269
thermodynamic characterization of $Zr(Fe_xCr_{1-x})_2$–H systems, 149
thermodynamic properties of Tc, 195
Thin films
activation and deactivation mechanisms for thin-film Fe–Ti hydrides, 277
Thorium
crystal-field effects in rare earth compounds with $ThCr_2Si_2$ structure, 97
molten salt process for conversion of thorium oxide into metal, 73
Titanium
activation and deactivation mechanisms for thin-film Fe–Ti hydrides, 277
electronic structure of RhTi phases, 181
phase equilibria in Ti–Nb–Ge system at 1170 K, 239
Transition metals
prediction and synthesis of new intermetallic compounds between transition metals and rare earth metals, 167

Vanadium
calculation of diffusion paths in Mo–Nb–V systems, L11
effect of substitution of V in $Nd_2Fe_{14}B$ studied by Mössbauer spectroscopy, 79
Mössbauer study of site occupation in $YFe_{10}V_2$, L7

Yttrium
Mössbauer study of site occupation in $YFe_{10}V_2$, L7
Optical transitions of Er^{3+}:La_2O_2S and Er^{3+}:Y_2O_2S, 213

Zirconium
thermodynamic characterization of $Zr(Fe_xCr_{1-x})_2$–H systems, 149